

In the Claims:

This listing of claims replaces all prior versions.

1. (Previously presented) For use in an IP telephony system in which a control center is communicatively coupled to a plurality of IP telephony devices, a user-programmable communications arrangement comprising:

a user interface to display IP telephony configuration options for at least one of: user control of an IP telephony device, office telephone administration control of a plurality of telephony devices, and system administrator control of telephony system configuration; and

a programmable controller programmed to,
responsive to a user selecting one of the configuration options, program the control center and a computer processor circuit at each of the plurality of IP telephony devices, and

control communications between the control center and the plurality of IP telephony devices.

2. (Previously Presented) The user-programmable communications arrangement of claim 1, wherein the programmable controller is programmed to, in response to configuration options received from the user interface, communicate programming data to an IP telephony device to program the computer processor circuit at the IP telephony device to respond to an incoming call by announcing the call via the display, the call announce being effected without overtaking currently-running program applications at the IP telephony device, and wherein at least the user interface is part of a programmed computer.

3. (Previously Presented) The user-programmable communications arrangement of claim 2, wherein the call announce is effected using a locally-installed OOP applet that runs in the background of the computer.

4. (Original) The user-programmable communications arrangement of claim 2, wherein the call announce displays user control options including at least one of: caller ID, speaker phone, answer, forward to voicemail, hold, and call termination.
5. (Original) The user-programmable communications arrangement of claim 1, wherein the user interface includes a graphic user interface (GUI).
6. (Previously Presented) The user-programmable communications arrangement of claim 1, wherein the programmable communications arrangement includes one of the plurality of IP telephony devices.
7. (Previously presented) The user-programmable communications arrangement of claim 1, wherein the controller is programmed to access personal contact information.
8. (Original) The user-programmable communications arrangement of claim 7, wherein the personal contact information is arranged in a searchable database accessible by the controller, the database being accessible via user-defined shuffle-search statements.
9. (Previously presented) The user-programmable communications arrangement of claim 1, wherein the controller is programmed to provide a control interface for system administration control of an IP telephony network, the interface being programmed to provide at least one of: IP telephony system configuration and system status information.
10. (Original) The user-programmable communications arrangement of claim 9, wherein the IP telephony system status information includes at least one of: IP address assignment information for telephony devices, user-access security control level settings, current telephony device hardware settings, display settings for the controller, and telephony device location information.

11. (Previously presented) The user-programmable communications arrangement of claim 9, wherein the controller is programmed to control at least one of: telephony device address assignment, user-access permissions, system report generation, display settings for the controller, voice mail parameters, IP telephony device hardware configuration, system backups, call routing protocol, call accounting, email configuration settings and call logging.

12. (Previously presented) The user-programmable communications arrangement of claim 1, wherein the controller is programmed to configure the control center and the plurality of IP telephony devices using OOP for providing user-selected IP telephony configuration information to the control center.

13. (Original) The user-programmable communications arrangement of claim 1, wherein user control of an IP telephony device includes active call control and call receive settings including at least one of: speaker phone activation, call answer, call forward to voicemail, call forward to another number or IP telephony address, call hold, call termination, display of caller ID, speed dial, call transfer, redial, voicemail forwarding, voicemail messaging, multi-party calling call muting, video control, and remote access control for remote access to telephony services.

14. (Previously presented) The user-programmable communications arrangement of claim 1, wherein each of the plurality of IP telephony devices includes a CPU, and wherein the user interface and controller are further programmed to:

provide user-selected email configuration information to a control center communicatively coupled to each CPU;

display a control interface for at least one of: user control of email configuration, office administration control of the plurality of CPUs, and system administrator control of email system configuration; and

the email configuration information being selected to control communications between, and to programmably configure, the control center and the plurality of CPUs.

15. (Previously presented) A user-programmable communications arrangement comprising:

a user-interface device having a display, the device being programmed to provide IP telephony communications configuration information to a user via the display and to communicate IP telephony communications configuration selections from the user to a CPU; and

a programmable CPU communicatively coupled to the user interface device and having an OOP interface coupled to an IP telephony communications link, the CPU being programmed to receive the IP telephony communications configuration selections from the user-interface device and, in response to the received selections, programmably configure selected IP telephony devices of an IP telephony communications system via the IP telephony communications link.

16. (Previously presented) The user-programmable communications controller of claim 15, wherein the CPU is programmed to control the scope of IP telephony communications configuration selections that can be made by a particular user.

17. (Original) The user-programmable communications controller of claim 15, wherein the IP telephony system includes a memory storage device having user-access configuration data, wherein the CPU receives the configuration data for controlling the scope of configuration selections that can be made by a particular user.

18. (Previously presented) The user-programmable communications controller of claim 17, wherein the memory storage device is programmed to send display information to the user-interface device using OOP, the display information including available IP telephony communications selections.

19. (Original) The user-programmable communications controller of claim 15, wherein the user-interface device communicates the configuration selections using OOP.

20. (Previously presented) A user-programmable communications control system for controlling a communications network using OOP code, the control system comprising:

a plurality of telephony devices coupled to an IP communications link and configurable to communicate IP telephony data;

a computer station having an OOP interface, the station being programmed to display communications information including telephony communications information and to provide communications control selections including telephony control selections to the IP communications link; and

a programmable communications server having an IP telephony switch and an OOP interface coupled to the IP communications link and programmed to receive the communications control selections, the programmable communications server being programmed to control the communications network and configure a computer processor circuit at each of the plurality of telephony devices, responsive to the selections received through the OOP interface.

21. (Original) The user-programmable communications control system of claim 20, wherein the scope of communications control selections that can be made at the computer station is controlled by the programmable communications server based on a predefined user-access permission level.

22. (Previously presented) The user-programmable communications control system of claim 20, further comprising a plurality of the computer stations, wherein programmable communications server is programmed to receive communications control selections from each of the plurality of computer stations.

23. (Previously presented) The user-programmable communications arrangement of claim 1, further including the control center, wherein the programmable controller is programmed to configure the control center by providing configuration information to control interactions between the control center and each of the plurality of IP telephony devices, the plurality of IP telephony devices being remote from the programmable controller.

24. (Previously presented) The user-programmable communications arrangement of claim 1, further including the control center, wherein the programmable controller is programmed to configure each of the plurality of IP telephony devices via communications with the control center.

25. (Previously Presented) The user-programmable communications arrangement of claim 1, wherein the user interface and the programmable controller are part of a programmed computer used in an IP telephone.

26. (Previously presented) The user-programmable communications arrangement of claim 15, wherein the CPU is programmed to control selected functions of selected IP telephony devices of an IP telephony communications system by configuring a plurality of IP telephony devices.

27. (Previously Presented) The user-programmable communications control system of claim 20, wherein

the computer station provides communications control selections input by an administrator user via the OOP interface in response to the user meeting a predefined user-access permission level, and

the programmable communications server controls all of the plurality of telephony devices in response to selections input at the OOP interface of the computer station by the administrator user.